

SURVEY OF THE HARBOR OF BALTIMORE.

LETTER

FROM THE

SECRETARY OF THE NAVY,

TRANSMITTING A REPORT ON

THE SURVEY OF THE HARBOR OF BALTIMORE.

DECEMBER 18, 1826.

Read, and laid upon the table.

WASHINGTON :

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1826.

NAVY DEPARTMENT, 16th December, 1826.

SIR: In compliance with the resolution of the House of Representatives, of the 14th instant, directing the Secretary of the Navy to report the result of the recent survey of the harbor of Baltimore. I have the honor to transmit copy of the Report, made by Master Commandant Claxton, containing the result of the survey of that harbor.

The original Chart, prepared with much care, also accompanies this Report; and it is respectfully requested, that it may be returned to the Department, after it has been used by the House of Representatives.

The survey was executed by Lieutenant J. W. Sherburne, under the superintendence, in the first instance, of Captain Spence; and, subsequently to his death, of Master Commandant Claxton.

I have the honor to be.

Very respectfully, &c.

SAM'L L. SOUTHARD.

The SPEAKER

Of the House of Representatives.

BALTIMORE, *November 4th*, 1826.

SIR: I have the honor to inform you, that the River Patapsco and harbor of Baltimore were, at the instance of the Insurance Companies of this city, accurately surveyed in the year 1817, and a chart predicated on that survey published, a copy of which I enclose. I also transmit to you a chart founded on the survey recently taken, in which will be observed a more minute examination of the river, and the several points in the harbor supposed useful for Naval purposes.

In proceeding to answer your several interrogatories, in the order in which they are given, I beg leave to state, that, in addition to my own observation, I have been aided by the experience of the best pilots, and the sound judgment of well informed individuals, in obtaining the various facts called for by your letter of instruction.

1st. The depth of water upon the bar being the first point to which you have directed my attention, I reply, by stating, that the highest spring tides give a depth of twenty feet, that a common tide gives nineteen feet, and the lowest tides seventeen feet of water upon the bar, at high water mark. The average perpendicular rise of the tide is eighteen inches.

2d. The depth of water upon the bar is materially affected by particular winds; a gale from the southward and eastward, forces the waters of the Atlantic into the Chesapeake Bay, and produces a rise on the bar to the height of three feet above an ordinary tide, giving a depth of twenty-two feet; a gale from the North, on the contrary, drives the waters of the Chesapeake into the Ocean, reduces the water three feet below the common low-water mark, and thus leaves a depth of fifteen feet only on the bar.

3d. The current in the river, when unaffected by external causes, runs at the rate of one mile and an half per hour.

4th. The channel way for beating over the bar, varies in breadth from one third, to half a mile. The bar may be said to extend for the space of nine miles, beginning at the sand knowles six miles below North Point, and terminating at the deep water off Hawkins' Point. The bottom throughout is soft mud, with the exception of the numerous sand knowles above mentioned, having on their surface a depth of eighteen feet water. The wind from the East to Southwest, is suitable for vessels bound in, and from the North-north-east to South-west, when bound out.

5th. The prevailing winds are from the Northwest and South-east. I have ascertained, from a Meteorological Table, compiled by Lewis Brantz, Esq., that the average of six successive years, gave the wind from the Northwest 106 days, Northeast 67 days, South-east 105 days, Southwest 75 days, and 12 days of calm.

6th. The anchorage for vessels having crossed the bar, is abundantly extensive for the largest fleets.

7th. The proximity to the city constitutes, in a great measure, the "convenience for receiving supplies from the shore."

8th. Good water can be obtained at various watering places now established in the harbor, and which may be multiplied to any extent desired.

9th. The city of Baltimore, from its magnitude and resources, could, at all times, afford the necessary provisions and stores for a fleet. These may be said to be her staples.

10th. The harbor of Baltimore possesses favorable positions for a Navy Yard. Three sites have been examined, two only of which are deemed worthy of present consideration. The one designated on the Chart by the letter A, is situated on the Eastern side of the harbor, a short distance below Harris's Creek. It has for its recommendation the deepest water to be found, perfectly retired by land and water, facility of transportation and intercourse with the commercial part of the city, but seated on a bank of twenty feet in height, and which gradually becomes more elevated as you recede from the river, and open by land, to the incursions of an enemy.

11th. To this point, vessels drawing 20 feet water can approach to within 250 feet of the present shore.

12th. The quantity of water it can furnish is not known; but the quality of it, as ascertained from a well on the premises, is found to be nauseous to the palate.

13th. The position bears a reputation for great unhealthiness, but is supposed to be susceptible of improvement, by filling up a marshy ravine, forming its Southern boundary. The soil is clay and sand.

15th. The facility for wharfing is as favorable as can be desired, with the exception of the superabundant earth, which may be disposed of, in the manner suggested in the last article.

The other position, marked B, is situated on the West side of the harbor, at, and below Locust Point. It is situated on an extensive plane of fourteen feet elevation above the surface of the water; possesses, in a still greater degree, a facility for wharfing, of transportation and intercourse with the town, is supposed to be healthy, retired in its situation, and is covered from assault by Fort McHenry; but has less depth of water; for, at the distance of 400 feet from the shore, there is but $17\frac{1}{2}$ feet of water, and which does not materially deepen, until you begin to approach the position A, on the opposite shore. This site appearing to possess great advantages in point of location, health, protection and defence, I deem it proper to suggest, that the water can be readily, and at inconsiderable expense, deepened to 20 feet, by means of the admirable mud-excavators now in operation in the harbor. The soil of this position is clay, and the bottom of the river a very soft mud.

As there are no springs or pumps in the vicinity, it is not known what may be the quality or quantity of its water; but, there is every reason to suppose, that an examination would prove satisfactory. It is, however, proper to observe, that to both these positions a sufficiency of good water, for every ordinary purpose, can be conveyed, by conduits, similar to those that now supply every part of Baltimore.

15th. The worm exists in the harbor; but, owing to the freshness of the water, is not considered destructive—in fact, no precautionary means are adopted to protect any of the works in the harbor against it.

All which is respectfully submitted.

ALEXANDER CLAXTON.

Hon. SAMUEL L. SOUTHARD,

Secretary of the Navy.

